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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,387

07/06/2006

Bian Jianzheng

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22913

7590

07/02/2008

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

07/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,387	Applicant(s) JIANZHENG, BIAN	
	Examiner MICHAEL P. FERGUSON	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

The following guidelines illustrate the preferred content for the specification of a utility application. These guidelines are suggested for the applicant's use.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent

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application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they

should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

2. The disclosure is objected to because of the following informalities:

In the specification, paragraphs **[0026]** and **[0027]** fail to comply with the suggested content for the BRIEF DESCRIPTION OF THE DRAWINGS section of the specification, as set forth above.

Examiner notes that the amendment to the specification, submitted February 29, 2008, has not been entered. The contents of paragraphs **[0026]** and **[0027]** should be located in the DETAILED DESCRIPTION section of the specification before paragraph **[0028]**.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (Figures 1-3) in view of Schuster (US 5,435,680).

As to claim 9, Applicant's admitted prior art (Figures 1-3) discloses a connecting lock for exhibition stands, the connecting lock comprising:

a lock shell **1** having inclined bearing surfaces **a,a'** (Figure 1 reprinted below with annotations) in a front portion thereon;

a lock plate **2** having a front end and a back end, a plurality of plate tongues **1010,1011,1012** being disposed at the front end of the lock plate, an end of each plate tongue being bent into a hook **21,22,23** with a reverse bending direction between adjacent hooks and each plate tongue having a beveled surface, the plate tongues being separated by a plurality of elongated slots **1001,1002**, each slot being divided into three sections **41,42,43** of different widths;

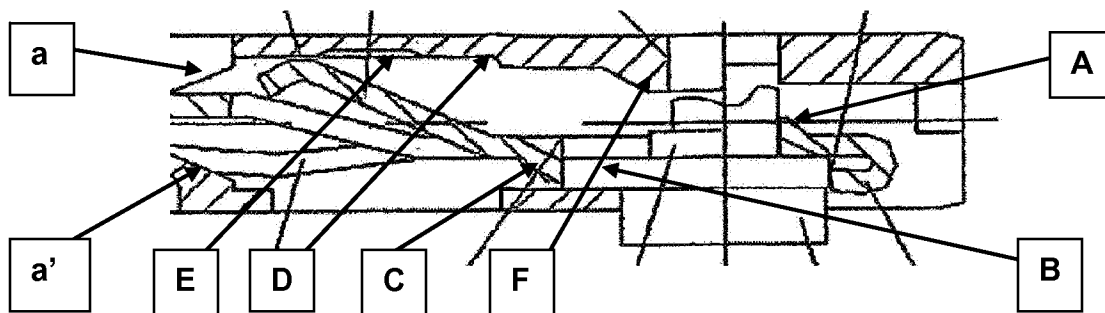
a stop tooth **A** disposed on the lock plate (tooth **A** engages cam surface **362** to limit [stop] rotation of lock cam **3**; thus constituting a stop tooth; Figure 1); and

an eccentric lock cam **3**, having an eccentric cam **B**, the lock plate being inserted into the lock shell, and the eccentric lock cam being inserted through a first hole and a

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second hole **5**, and into a third hole **53**, wherein the first hole has an arc and the first hole and the third hole are formed in the lock shell, and the second hole is formed in the lock plate,

wherein the eccentric cam on the eccentric lock cam and the stop tooth on the lock plate constitute a stop structure, wherein when the eccentric lock cam is rotated within the first, second and third holes, the eccentric cam engages the stop tooth, thereby limiting rotation of the eccentric lock cam and movement of the lock plate relative to the lock shell (Figures 1-3).



Applicant's admitted prior art fails to disclose a connecting lock comprising an eccentric lock cam having a quincunx hole to facilitate rotation of the eccentric lock cam.

Schuster teaches a fastener having a quincunx hole **30** to facilitate rotation of the faster; quincunx hole **30** providing more secure seating and centering of a drive tool within the head of the fastener, enabling one to exert a high torque on the fastener without the risk of slippage between the fastener and the drive tool (Figures 5 and 6, column 2 lines 6-31, column 4 lines 3-16). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connecting lock disclosed by Applicant's admitted prior art (Figures 1-3) wherein the

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eccentric lock cam has a quincunx hole as taught by Schuster in order to provide more secure seating and centering of a drive tool within the head of the lock cam, enabling one to exert a high torque on the lock cam without the risk of slippage between the fastener and the cam.

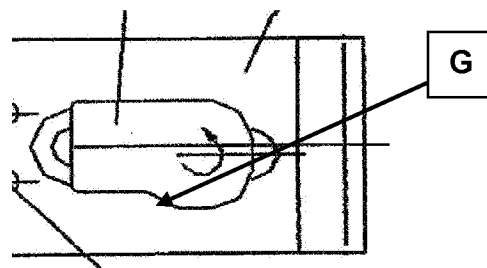
As to claim 10, Applicant's admitted prior art (Figure 1) discloses a connecting lock comprising a barrier tooth **C** on the lock plate **2** (tooth **C** forms a barrier of hole **5**; thus constituting a barrier tooth; Figures 1 and 3).

As to claim 11, Applicant's admitted prior art (Figure 1) discloses a connecting lock wherein a first rectangular hole **D** is formed on an upper surface of the lock shell **1**.

As to claim 12, Applicant's admitted prior art (Figure 1) discloses a connecting lock wherein a second rectangular hole **E** is formed on an upper side of the lock shell **1**.

As to claim 13, Applicant's admitted prior art (Figure 1) discloses a connecting lock comprising a flange strip **F** disposed on an internal surface of a bottom side of the lock shell **1**.

As to claim 14, Applicant's admitted prior art (Figure 3) discloses a connecting lock comprising a flange **G** (Figure 3 reprinted below with annotations) on the hole of the lock plate **2**.



As to claim 15, Applicant's admitted prior art (Figure 1) discloses a connecting lock wherein the back end of the lock plate **2** is bent into a U-shaped half-loop **26** having an end surface that is a planar.

As to claim 16, Applicant's admitted prior art (Figure 1) discloses a connecting lock comprising a wedged bulge **C,26** disposed on the lock plate **2** (bulges **C,26** wedge against eccentric cam **B**; thus constituting a wedged bulge; Figure 1).

Response to Arguments

5. Applicant's arguments with respect to claims 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The newly added limitations of "and a quincunx hole to facilitate rotation of the eccentric lock cam" in claim 9 (lines 10-11) necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF
06/27/08

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679